

EDUCATION.—Not later than one year after the date of the enactment of this Act, the Secretary of Defense, in consultation with the Joint Chiefs of Staff, shall ensure that the curriculum for professional military education is revised in each of the military services to incorporate periodic courses on militarily significant emerging technologies that increasingly build the knowledge base, vocabulary, and skills necessary to intelligently analyze and utilize emerging technologies in the tactical, operational, and strategic levels of warfighting and warfighting support.

(c) EMERGING TECHNOLOGY-CODED BILLETS WITHIN THE DEPARTMENT OF DEFENSE.—

(1) **IN GENERAL.**—Not later than one year after the date of the enactment of this Act, the Secretary of Defense shall ensure that the military services—

(A) code appropriate billets to be filled by emerging technology-qualified officers; and

(B) develop a process for officers to become qualified in emerging technologies.

(2) **APPROPRIATE POSITIONS.**—Emerging technology-coded positions may include, as appropriate—

(A) positions responsible for assisting with acquisition of emerging technologies;

(B) positions responsible for helping integrate technology into field units;

(C) positions responsible for developing organizational and operational concepts;

(D) positions responsible for developing training and education plans; and

(E) leadership positions at the operational and tactical levels within the military services.

(3) **QUALIFICATION PROCESS.**—The process for qualifying officers for emerging technology-coded billets shall be modeled on a streamlined version of the joint qualification process and may include credit for serving in emerging technology focused fellowships, emerging technology focused talent exchanges, emerging technology focused positions within government, and educational courses focused on emerging technologies.

SA 3949. Mr. PORTMAN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. ____ SUPPORT FOR INDUSTRY PARTICIPATION IN INTERNATIONAL STANDARDS ORGANIZATIONS.

(a) **DEFINITIONS.**—In this section:

(1) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Small Business Administration.

(2) **ARTIFICIAL INTELLIGENCE.**—The term “artificial intelligence” has the meaning given the term in section 238(g) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 2358 note).

(3) **COVERED ENTITY.**—The term “covered entity” means a small business concern that is incorporated and maintains a primary place of business in the United States.

(4) **SMALL BUSINESS CONCERN.**—The term “small business concern” has the meaning given the term in section 3 of the Small Business Act (15 U.S.C. 632).

(b) **ESTABLISHMENT.**—Not later than 180 days after the date of enactment of this Act,

the Administrator shall establish a program to support participation by covered entities in meetings and proceedings of standards development organizations in the development of voluntary technical standards.

(c) **ACTIVITIES.**—In carrying out the program established under subsection (b), the Administrator shall award competitive, merit-reviewed grants to covered entities to cover the reasonable costs, up to a specified ceiling, of participation of employees of those covered entities in meetings and proceedings of standards development organizations, including—

(1) regularly attending meetings;

(2) contributing expertise and research;

(3) proposing new work items; and

(4) volunteering for leadership roles such as a convener or editor.

(d) **AWARD CRITERIA.**—The Administrator may only provide a grant under this section to a covered entity that—

(1) demonstrates deep technical expertise in key emerging technologies and technical standards, including artificial intelligence and related technologies;

(2) commits personnel with such expertise to regular participation in international bodies responsible for developing standards for such technologies over the period of the grant; and

(3) agrees to participate in efforts to coordinate between the Federal Government and industry to ensure protection of national security interests in the setting of international standards.

(e) **NO MATCHING CONTRIBUTION.**—A recipient of an award under this section shall not be required to provide a matching contribution.

(f) **EVALUATION.**—In making awards under this section, the Administrator shall coordinate with the Director of the National Institute of Standards and Technology, who shall provide support in the assessment of technical expertise in emerging technologies and standards setting needs.

(g) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated for fiscal year 2022 and each fiscal year thereafter \$1,000,000 to carry out the program established under this section.

SA 3950. Mr. WICKER (for himself, Mr. WARNOCK, Mr. DUCKWORTH, Mr. TOOMEY, Mrs. CAPITO, Mr. SCOTT of South Carolina, Mr. CASEY, and Mr. BOOKER) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle G of title X of division A, add the following:

SEC. 10 ____ WILLIAM T. COLEMAN, JR., FEDERAL BUILDING DESIGNATION.

(a) **IN GENERAL.**—The headquarters building of the Department of Transportation located at 1200 New Jersey Avenue, SE, in Washington, DC, shall be known and designated as the “William T. Coleman, Jr., Federal Building”.

(b) **REFERENCES.**—Any reference in a law, map, regulation, document, paper, or other record of the United States to the building referred to in subsection (a) shall be deemed to be a reference to the “William T. Coleman, Jr., Federal Building”.

SA 3951. Mrs. BLACKBURN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

Strike section 853 and insert the following:
SEC. 853. DETERMINATION WITH RESPECT TO OPTICAL FIBER FOR DEPARTMENT OF DEFENSE PURPOSES.

(a) **DETERMINATION.**—

(1) **IN GENERAL.**—Not later than 120 days after the date of the enactment of this Act, the Secretary of Defense shall review access, metro, and long-haul passive optical fiber and optical fiber cable that is manufactured or produced by an entity owned or controlled by the People's Republic of China for potential inclusion on the list of covered communications equipment pursuant to section 2 of the Secure and Trusted Communications Networks Act of 2019 (47 U.S.C. 1601).

(2) **APPLICABILITY.**—If the Secretary of Defense makes a determination that any such optical fiber or optical fiber cable would pose an unacceptable risk to the national security of the United States or the security and safety of United States persons and should be included on the list, any such inclusion shall apply to such optical fiber or optical fiber cable deployed after such determination.

(b) **NOTIFICATION REQUIREMENT.**—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall notify the congressional defense committees of the findings of the review and determination required under subsection (a).

(c) **DEFINITIONS.**—In this section:

(1) The term “access” means optical fiber and optical fiber cable that connects subscribers (residential and business) and radio sites to a service provider.

(2) The term “long haul” means optical fiber and optical fiber cable that connects cities and metropolitan areas.

(3) The term “metro” means optical fiber and optical fiber cable that connects city business districts and central city and suburban areas.

(4) The term “passive” means unpowered optical fiber and optical fiber cable.

SA 3952. Mrs. BLACKBURN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

SEC. ____ PROHIBITION ON OPERATION OR PROCUREMENT OF CERTAIN FOREIGN-MADE UNMANNED AIRCRAFT SYSTEMS.

(a) **PROHIBITION ON AGENCY OPERATION OR PROCUREMENT.**—Except as provided in subsection (b) and subsection (c)(3), the Secretary of Defense and the Secretary of Homeland Security may not operate, provide financial assistance for, or enter into or renew a contract for the procurement of—

(1) an unmanned aircraft system (referred to in this section as “UAS”) that—

(A) is manufactured in a covered foreign country or by a corporation domiciled in a covered foreign country;

(B) uses flight controllers, radios, data transmission devices, cameras, or gimbals manufactured in a covered foreign country or by a corporation domiciled in a covered foreign country;

(C) uses a ground control system or operating software developed in a covered foreign country or by a corporation domiciled in a covered foreign country; or

(D) uses network connectivity or data storage located in a covered foreign country or administered by a corporation domiciled in a covered foreign country;

(2) a software operating system associated with a UAS that uses network connectivity or data storage located in a covered foreign country or administered by a corporation domiciled in a covered foreign country; or

(3) a system for the detection or identification of a UAS, which system is manufactured in a covered foreign country or by a corporation domiciled in a covered foreign country.

(b) WAIVER.—

(1) IN GENERAL.—The Secretary of Defense or the Secretary of Homeland Security may waive the prohibition under subsection (a) if the Secretary submits a written certification described in paragraph (2) to—

(A) in the case of the Secretary of Defense, the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives; and

(B) in the case of the Secretary of Homeland Security, the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Homeland Security of the House of Representatives.

(2) CONTENTS.—A certification described in this paragraph shall certify that a UAS, a software operating system associated with a UAS, or a system for the detection or identification of a UAS described in any of subparagraphs (A) through (C) of subsection (a)(1) that is the subject of a waiver under paragraph (1) is required—

(A) in the national interest of the United States;

(B) for counter-UAS surrogate research, testing, development, evaluation, or training; or

(C) for intelligence, electronic warfare, or information warfare operations, testing, analysis, and or training.

(3) NOTICE.—The certification described in paragraph (1) shall be submitted to the Committees specified in such paragraph by not later than the date that is 14 days after the date on which a waiver is issued under such paragraph.

(c) EFFECTIVE DATES.—

(1) IN GENERAL.—This Act shall take effect on the date that is 120 days after the date of the enactment of this Act.

(2) WAIVER PROCESS.—Not later than 60 days after the date of the enactment of this Act, the Secretary of Defense and the Secretary of Homeland Security shall each establish a process by which the head of an office or component of the Department of Defense or Department of Homeland Security, respectively, may request a waiver under subsection (b).

(3) EXCEPTION.—Notwithstanding the prohibition under subsection (a), the head of an office or component of the Department of Defense or Department of Homeland Security may continue to operate a UAS, a software operating system associated with a UAS, or a system for the detection or identification of a UAS described in any of subparagraphs (1) through (3) of subsection (a) that was in the inventory of such office or

component on the day before the effective date of this Act until, the later of—

(A) the date on which the Secretary of Defense or Secretary of Homeland Security, as the case may be

(i) grants a waiver relating thereto under subsection (b); or

(ii) declines to grant such a waiver, or

(B) 1 year after the date of the enactment of this Act.

(d) DRONE ORIGIN SECURITY REPORT TO CONGRESS.—

(1) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense and the Secretary of Homeland Security shall each submit to the congressional committees described in paragraph (2) a terrorism threat assessment and report that contains information relating to the following:

(A) The extent to which the Department of Defense or Department of Homeland Security, as the case may be, has previously analyzed the threat that a UAS, a software operating system associated with a UAS, or a system for the detection or identification of a UAS from a covered foreign country operating in the United States poses, and the results of such analysis.

(B) The number of UAS, software operating systems associated with a UAS, or systems for the detection or identification of a UAS from a covered foreign country in operation by the Department of Defense or Department of Homeland Security, as the case may be, including an identification of the component or office of the Department at issue, as of such date.

(C) The extent to which information gathered by such a UAS, a software operating system associated with a UAS, or a system for the detection or identification of a UAS from a covered foreign country could be employed to harm the national or economic security of the United States.

(2) COMMITTEES DESCRIBED.—The congressional committees described in this paragraph are—

(A) in the case of the Secretary of Defense, the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives; and

(B) in the case of the Secretary of Homeland Security, the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Homeland Security of the House of Representatives.

(e) DEFINITIONS.—In this section:

(1) COVERED FOREIGN COUNTRY.—The term “covered foreign country” means a country that—

(A) the intelligence community has identified as a foreign adversary in its most recent Annual Threat Assessment; or

(B) the Secretary of Homeland Security, in coordination with the Director of National Intelligence, has identified as a foreign adversary that is not included in such Annual Threat Assessment.

(2) INTELLIGENCE COMMUNITY.—The term “intelligence community” has the meaning given such term in section 3(4) of the National Security Act of 1947 (50 U.S.C. 3003(4)).

(3) UNMANNED AIRCRAFT SYSTEM; UAS.—The terms “unmanned aircraft system” and “UAS” have the meaning given the term “unmanned aircraft system” in section 331 of the FAA Modernization and Reform Act of 2012 (Public Law 112–95; 49 U.S.C. 44802 note).

SA 3953. Mrs. BLACKBURN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the De-

partment of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle G of title X, add the following:

SEC. 1064. PROHIBITION ON THE USE OF THE DIGITAL YUAN.

(a) DEFINITIONS.—In this section—

(1) the term “digital yuan” means the digital currency of the People’s Bank of China, or any successor digital currency of the People’s Republic of China;

(2) the term “executive agency” has the meaning given that term in section 133 of title 41, United States Code; and

(3) the term “information technology” has the meaning given that term in section 11101 of title 40, United States Code.

(b) PROHIBITION ON THE USE OF DIGITAL YUAN.—

(1) IN GENERAL.—Not later than 60 days after the date of enactment of this Act, the Director of the Office of Management and Budget, in consultation with the Administrator of General Services, the Director of the Cybersecurity and Infrastructure Security Agency, the Director of National Intelligence, and the Secretary of Defense, and consistent with the information security requirements under subchapter II of chapter 35 of title 44, United States Code, shall develop standards and guidelines for executive agencies requiring the removal of any digital yuan from information technology.

(2) NATIONAL SECURITY AND RESEARCH EXCEPTIONS.—The standards and guidelines developed under paragraph (1) shall include—

(A) exceptions for law enforcement activities, national security interests and activities, and security researchers; and

(B) for any authorized use of digital yuan under an exception, requirements for agencies to develop and document risk mitigation actions for such use.

SA 3954. Mrs. BLACKBURN (for herself and Mr. LUJÁN) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title X, insert the following:

SEC. _____. STUDY ON NATIONAL LABORATORY CONSORTIUM FOR CYBER RESILIENCE.

(a) STUDY REQUIRED.—The Secretary of Homeland Security shall, in coordination with the Secretary of Energy and the Secretary of Defense, conduct a study to analyze the feasibility of authorizing a consortia within the National Laboratory system to address information technology and operational technology cybersecurity vulnerabilities in critical infrastructure (as defined in section 1016(e) of the Critical Infrastructure Protection Act of 2001 (42 U.S.C. 5195c(e))).

(b) ELEMENTS.—The study required under subsection (a) shall include the following:

(1) An analysis of any additional authorities needed to establish a research and development program to leverage the expertise at